VOLUME XVI, PART II

SUBJECT INDEX.

A

Aggregates.

A New Form of Specifications for Concrete —. Cloyd M. Chapman, 180. Discussion, 188.

The Specific Gravity of Non-Homogeneous —. Prévost Hubbard and F. H. Jackson, Jr., 378. Discussion, 402.

Aluminum Bronze.

—: Some Recent Tests and Their Significance. W. M. Corse and G. F. Comstock, 117. Discussion, 145.

Apparatus (see also **Testing Machines**).

An — for Determining Soil Pressures. A. T. Goldbeck and E. B. Smith, 309.

An — for Testing the Standard Cast-Iron Arbitration Bar. H. L. Morse, 282.

Emulsification of Mineral Lubricating Oils: — and Test Method. P. H. Conradson, 273. Discussion, 280.

Arbitration Bar.

An Apparatus for Testing the Standard Cast-Iron —. H. L. Morse, 282.

Axles.

Heat Treatment of Carbon-Steel Locomotive —; Water vs. Oil Quenching. C. D. Young, 53. Discussion, 65.

B

Bars.

An Apparatus for Testing the Standard Cast-Iron Arbitration Bar. H. L. Morse, 282.

The Strength of Clamped Splices in Concrete Reinforcement —. E. L. Lasier, 209. Discussion, 233.

Boiler Tubes.

Recrystallization as a Factor in the Failure of —. A. E. White and H. F. Wood, 80. Discussion, 111.

Box-Testing Machine.

The Development of a — and Some Results of Tests. J. A. Newlin and T. R. C. Wilson, 320.

Brass Condenser Tubes.

An Investigation Leading to Specifications for —. A. E. White, 151. Discussion, 168.

Brick.
Practical Methods for Testing Refractory Fire —. C. E. Nesbitt and M. L. Bell, 349. Discussion, 373.
Bronze.
Aluminum —: Some Recent Tests and Their Significance. W. M. Corse and G. F. Comstock, 117. Discussion, 145.

C

Carbon Steel.
Heat Treatment of — Locomotive Axles: Water vs. Oil Quenching. C. D. Young, 53. Discussion, 65.
Notes on the Hardening and Tempering of Eutectoid — and on the Shore Test. Henry M. Howe and Arthur G. Levy, 5. Discussion, 51.
Cast-Iron Arbitration Bar.
An Apparatus for Testing the Standard —. H. L. Morse, 282.
Clamped Splices.
The Strength of — in Concrete Reinforcement Bars. E. L. Lasier, 209. Discussion, 233.
Concrete.
A Method of Making Wear Tests of —. D. A. Abrams, 194. Discussion, 203.
A New Form of Specifications for — Aggregates. Cloyd M. Chapman, 180. Discussion, 188.
The Strength of Clamped Splices in — Reinforcement Bars. E. L. Lasier, 209. Discussion, 233.
Condenser Tubes.
An Investigation Leading to Specifications for Brass —. A. E. White, 151. Discussion, 168.
Corrosion.
Method for Testing the Durability of Pipe Under —. F. N. Speller, 343. Discussion, 346.

D

Durability.
Method for Testing the — of Pipe Under Corrosion. F. N. Speller, 343. Discussion, 346.

E

Elongation.
Some Experiments on Plastic — of Wire. A. V. de Forest, 455. Discussion, 465.
Emulsification.
— of Mineral Lubricating Oils: Apparatus and Test Method. P. H. Conradson, 273. Discussion, 280.
Quantitative Test for Resistance of Lubricating Oils to —. Winslow H. Herschel, 248. Discussion, 266.

Endurance.
— and Impact Tests of Metals. D. J. McAdam, Jr., 292. Discussion, 307.
Eutectoid Carbon Steel.
Notes on the Hardening and Tempering of — and on the Shore Test. Henry M. Howe and Arthur G. Levy, 5. Discussion, 51.
Export Trade.
National Standard Specifications and Their Relation to —. William R. Webster, 476. Discussion, 488.

F

Fire Brick.
Practical Methods for Testing Refractory —. C. E. Nesbitt and M. L. Bell, 349. Discussion, 373.

H

Hardening.
Notes on the — and Tempering of Eutectoid Carbon Steel and on the Shore Test. Henry M. Howe and Arthur G. Levy, 5. Discussion, 51.
Heat Treatment.
— of Carbon-Steel Locomotive Axles: Water vs. Oil Quenching. C. D. Young, 53. Discussion, 65.

I

Impact.
Endurance and — Tests of Metals. D. J. McAdam, Jr., 292. Discussion, 307.

L

Linseed Oil.
The Acceptability of —. C. D. Holley, 239. Discussion, 246.
Locomotive Axles.
Heat Treatment of Carbon-Steel —: Water vs. Oil Quenching. C. D. Young, 53. Discussion, 65.
Lubricating Oils.
Emulsification of Mineral —: Apparatus and Test Method. P. H. Conradson, 273. Discussion, 280.
Quantitative Test for Reistance of — to Emulsification. Winslow H. Herschel, 248. Discussion, 266.

M

Metals (see also **Bronze, Steel**).
Endurance and Impact Tests of —. D. J. McAdam, Jr., 292. Discussion, 307.

Methods (see also **Testing, Tests**).
A Method of Making Wear Tests of Concrete. D. A. Abrams, 194. Discussion, 203.
Emulsification of Mineral Lubricating Oils: Apparatus and Test Method. P. H. Conradson, 273. Discussion, 280.
Method for Testing the Durability of Pipe Under Corrosion. F. N. Speller, 343. Discussion, 346.
Practical — for Testing Refractory Fire Brick. C. E. Nesbitt and M. L. Bell, 349. Discussion, 373.
Mineral Lubricating Oils.
Emulsification of —: Apparatus and Test Method. P. H. Conradson, 273. Discussion, 280.

N

National Standard Specifications.
— and Their Relation to Export Trade. William R. Webster, 476. Discussion, 488.

O

Oil Quenching.
Heat Treatment of Carbon-Steel Locomotive Axles: Water vs. —. C. D. Young, 53. Discussion, 65.
Oils.
Emulsification of Mineral Lubricating —: Apparatus and Test Method. P. H. Conradson, 273. Discussion, 280.
Quantitative Test for Resistance of Lubricating — to Emulsification. Winslow H. Herschel, 248. Discussion, 266.
The Acceptability of Linseed Oil. C. D. Holley, 239. Discussion, 246.

P

Pipe.
Method for Testing the Durability of — Under Corrosion. F. N. Speller, 343. Discussion, 346.
Plastic Elongation.
Some Experiments on — of Wire. A. V. de Forest, 455. Discussion, 465.
Pressures.
An Apparatus for Determining Soil —. A. T. Goldbeck and E. B. Smith, 309.
Proportional Limit.
Relation between Yield Point and — in Various Grades of Steel. J. E. Howard, 403; T. D. Lynch, 413; H. F. Moore and F. B. Seely, 426. General Discussion, 434.

Q

Quantitative Test.
— for Resistance of Lubricating Oils to Emulsification. Winslow H. Herschel, 248. Discussion, 266.
Quenching.
Heat Treatment of Carbon-Steel Locomotive Axles: Water vs. Oil —. C. D. Young, 53. Discussion, 65.

R

Recrystallization.
— as a Factor in the Failure of Boiler Tubes. A. E. White and H. F. Wood, 80. Discussion, 111.
Refractory Fire Brick.
Practical Methods for Testing —. C. E. Nesbitt and M. L. Bell, 349. Discussion, 373.
Reinforcement Bars.
The Strength of Clamped Splices in Concrete —. E. L. Lasier, 209. Discussion, 233.
Repeated-Stress Calculations.
Constants and Diagrams for —. H. F. Moore and F. B. Seely, 470.

S

Shore Test.
Notes on the Hardening and Tempering of Eutectoid Carbon Steel and on the —. Henry M. Howe and Arthur G. Levy, 5. Discussion, 51.
Soil Pressure.
An Apparatus for Determining —. A. T. Goldbeck and E. B. Smith, 309.
Specific Gravity.
The — of Non-Homogeneous Aggregates. Prévost Hubbard and F. H. Jackson, Jr., 378. Discussion, 402.
Specifications.
A New Form of — for Concrete Aggregates. Cloyd M. Chapman, 180. Discussion, 188.
An Investigation Leading to — for Brass Condenser Tubes. A. E. White, 151. Discussion, 168.
National Standard — and Their Relation to Export Trade. William R. Webster, 476. Discussion, 488.
Splices.
The Strength of Clamped — in Concrete Reinforcement Bars. E. L. Lasier, 209. Discussion, 233.
Steel.
Heat Treatment of Carbon- — Locomotive Axles: Water vs. Oil Quenching. C. D. Young, 53. Discussion, 65.

Steel (*Continued*).
Notes on the Hardening and Tempering of Eutecoid Carbon — and on the Shore Test. Henry M. Howe and Arthur G. Levy, 5. Discussion, 51.
The Relation between Yield Point and Proportional Limit in Various Grades of —. J. E. Howard, 403; T. D. Lynch, 413; H. F. Moore and F. B. Seely, 426. General Discussion, 434.
Stress Calculations.
Constants and Diagrams for Repeated- —. H. F. Moore and F. B Seely, 470.

T

Tempering.
Notes on the Hardening and — of Eutectoid Carbon Steel and on the Shore Test. Henry M. Howe and Arthur G. Levy, 5. Discussion, 51.
Testing (see also **Tests**).
An Apparatus for — the Standard Cast-Iron Arbitration Bar. H. L. Morse, 282.
Method for — the Durability of Pipe Under Corrosion. F. N. Speller, 343. Discussion, 346.
Practical Methods for — Refractory Fire Brick. C. E. Nesbitt and M. L. Bell, 349. Discussion, 373.
Testing Machines.
The Development of a Box-Testing Machine and Some Results of Tests. J. A. Newlin and T. R. C. Wilson, 320.
Tests (see also **Testing**).
A Method of Making Wear — of Concrete. D. A. Abrams, 194. Discussion, 203.
Aluminum Bronze: Some Recent — and Their Significance. W. M. Corse and G. F. Comstock, 117. Discussion, 145.
Emulsification of Mineral Lubricating Oils: Apparatus and Test Method. P. H. Conradson, 273. Discussion, 280.
Endurance and Impact — of Metals. D. J. McAdam, Jr., 292. Discussion, 307.
Notes on the Hardening and Tempering of Eutectoid Carbon Steel and on the Shore Test. Henry M. Howe and Arthur G. Levy, 5. Discussion, 51.
Quantitative Test for Resistance of Lubricating Oils to Emulsification. Winslow H. Herschel, 248. Discussion, 266.
The Development of a Box-Testing Machine and Some Results of —. J. A. Newlin and T. R. C. Wilson, 320.
Tubes.
An Investigation Leading to Specifications for Brass Condenser —. A. E. White, 151. Discussion, 168.
Recrystallization as a Factor in the Failure of Boiler —. A. E. White and H. F. Wood, 80. Discussion, 111.

W

Water Quenching.
Heat-Treatment of Carbon-Steel Locomotive Axles: Water vs. Oil Quenching. C. D. Young, 53. Discussion, 65.

Wear Tests.
A Method of Making — of Concrete. D. A. Abrams, 194. Discussion, 203.

Wire.
Some Experiments on Plastic Elongation of —. A. V. de Forest, 455. Discussion, 465.

Y

Yield Point.
The Relation between — and Proportional Limit in Various Grades of Steel. J. E. Howard, 403; T. D. Lynch, 413; H. F. Moore and F. B. Seely, 426. General Discussion, 434.

AUTHOR INDEX.

A

Abrams, D. A.
A Method of Making Wear Tests of Concrete, 194.
Discussion, 206, 233.
Allen, H. B.
Discussion, 307.

B

Bell, M. L.
Practical Methods for Testing Refractory Fire Brick, 349.
Bleininger, A. V.
Discussion, 376.

C

Capp, J. A.
Discussion, 445.
Chapman, Cloyd M.
A New Form of Specifications for Concrete Aggregates, 180.
Discussion, 173, 175, 189, 192.
Collings, W. A.
Discussion, 234.
Comstock, G. F.
Aluminum Bronze: Some Recent Tests and Their Significance, 117.
Discussion, 145, 150.
Conradson, P. H.
Emulsification of Mineral Lubricating Oils: Apparatus and Test Method, 273.
Discussion, 266, 269, 270, 281.
Corse, W. M.
Aluminum Bronze: Some Recent Tests and Their Significance, 117.
Discussion, 145, 147.

D

de Forest, A. V.
Some Experiments on the Plastic Elongation of Wire, 455.
Discussion, 468.
Devries, R. P.
Discussion, 51, 67, 71, 146, 147, 149, 174, 438.

F

Ferguson, L. R.
Discussion, 188.
Fry, L. H.
Discussion, 73, 78, 440.

Fulweiler, W. H.
Discussion, 375.

G

Gardner, H. A.
Discussion, 246.
Goldbeck, A. T.
An Apparatus for Determining Soil Pressures, 309.

H

Hemstreet, G. P.
Discussion, 203.
Herschel, Winslow H.
Quantitative Test for Resistance of Lubricating Oils to Emulsification, 248.
Discussion, 269, 271, 280.
Hirshfeld, C. F.
Discussion, 111, 114.
Holley, C. D.
The Acceptability of Linseed Oil, 239.
Howard, J. E.
The Relation between Yield Point and Proportional Limit in Various Grades of Steel, 403.
Howe, Henry M.
Notes on the Hardening and Tempering of Eutectoid Carbon Steel and on the Shore Test, 5.
Discussion, 51, 65, 77, 111, 115, 465.
Hubbard, Prévost.
The Specific Gravity of Non-Homogeneous Aggregates, 378.

J

Jackson, F. H., Jr.
The Specific Gravity of Non-Homogeneous Aggregates, 378.
Discussion, 402.

L

Lasier, E. L.
The Strength of Clamped Splices in Concrete Reinforcement Bars, 209.
Discussion, 235, 402.
Levy, Arthur G.
Notes on the Hardening and Tempering of Eutectoid Carbon Steel and on the Shore Test, 5.
Long, W. F.
Discussion, 190.
Lynch, T. D.
The Relation between Yield Point and Proportional Limit in Various Grades of Steel, 413.
Discussion, 447.

M

Mackenzie, K. G.
Discussion, 280.
Mattimore, H. S.
Discussion, 206.
McAdam, D. J., Jr.
Endurance and Impact Tests of Metals, 292.
Discussion, 148, 308.
Merriman, Mansfield.
Discussion, 442.
Moldenke, Richard.
Discussion, 488.
Moore, H. F.
Constants and Diagrams for Repeated-Stress Calculations, 470.
The Relation between Yield Point and Proportional Limit in Various Grades of Steel, 426.
Discussion, 146, 148, 149, 440, 441.
Morse, H. L.
An Apparatus for Testing the Standard Cast-Iron Arbitration Bar, 282.
Discussion, 434.

N

Nesbitt, C. E.
Practical Methods for Testing Refractory Fire Brick, 349.
Discussion, 376.
Newlin, J. A.
The Development of a Box-Testing Machine and Some Results of Tests, 320.

O

Olshausen, G. R.
Discussion, 443.

P

Pickard, G. H.
Discussion, 246.
Pomeroy, L. R.
Discussion, 71.
Price, W. B.
Discussion, 172.
Purdy, R. C.
Discussion, 376.

S

Schuhmann, George.
Discussion, 346.

Seely, F. B.
Constants and Diagrams for Repeated-Stress Calculations, 470.
The Relation between Yield Point and Proportional Limit in Various Grades of Steel, 426.
Smith, E. B.
An Apparatus for Determining Soil Pressures, 309.
Speller, F. N.
Method for Testing the Durability of Pipe Under Corrosion, 343.
Discussion, 112, 116, 347.
Stalknecht, A. C.
Discussion, 268.
Stone, George C.
Discussion, 374.

U

Unger, J. S.
Discussion, 68, 373.

W

Webster, W. Reuben.
Discussion, 168, 175.
Webster, William R.
National Standard Specifications and Their Relation to Export Trade, 476.
Discussion, 489.
White, A. E.
An Investigation Leading to Specifications for Brass Condenser Tubes, 151.
Recrystallization as a Factor in the Failure of Boiler Tubes, 80.
Discussion, 115, 174, 175.
Wig, R. J.
Discussion, 189.
Wilson, T. R. C.
The Development of a Box-Testing Machine and Some Results of Tests, 320.
Wood, H. F.
Recrystallization as a Factor in the Failure of Boiler Tubes, 80.

Y

Young, C. D.
Heat Treatment of Carbon-Steel Locomotive Axles: Water vs. Oil Quenching, 53.
Discussion, 71, 77, 78, 441.